

## CLAIMS

What is claimed is:

- 1           1.     A method for transmitting information over a wireless network,  
2     comprising:  
3           converting incoming wireless signals to intermediate frequency (IF)  
4     signals;  
5           transmitting the converted IF signals over a wired network;  
6           retrieving the transmitted IF signals from the wired network; and  
7           converting the retrieved IF signals to digital data that can be routed to a  
8     destination.
- 1           2.     The method of claim 1, wherein the converting of the incoming  
2     wireless signals includes converting radio frequency (RF) signals to IF signals.
- 1           3.     The method of claim 1, wherein the wired network includes  
2     alternating current (AC) wiring.
- 1           4.     The method of claim 3, wherein the IF signals are baseband  
2     signals.
- 1           5.     The method of claim 1, wherein the destination is at least one of a  
2     gateway and server.
- 1           6.     An Access Point comprising:  
2           a radio frequency (RF) up/ down converter to convert RF signals to  
3     intermediate frequency (IF) analog signals; and  
4           an IF module to transmit the IF analog signals over a wired  
5     communication link for subsequent conversion into digital data at the  
6     destination.
- 1           7.     The Access Point of claim 6, wherein the wired communication  
2     link is alternating current (AC) electrical wiring.
- 1           8.     The Access Point of claim 6, wherein the wired communication  
2     link is a twisted pair telephone line.
- 1           9.     The Access Point of claim 6 further comprising an antenna to  
2     receive the RF signals.

- 1           10.    An Access Point comprising:  
2                a first software module operating as an up/down converter to convert  
3   wireless signals to intermediate frequency (IF) analog signals; and  
4                a second software module operating in conjunction with the first  
5   software module to transmit the IF analog signals over a wired communication  
6   link for subsequent conversion into digital data at the destination.
- 1           11.    The Access Point of claim 10, wherein the wired communication  
2   link is alternating current (AC) electrical wiring.
- 1           12.    The Access Point of claim 10, wherein the wired communication  
2   link is a twisted pair telephone line.
- 1           13.    The Access Point of claim 10 further comprising an antenna to  
2   receive the RF signals.
- 1           14.    The Access Point of claim 10, wherein the up/down converter is a  
2   radio frequency (RF) up/down converter to convert RF signals into the IF  
3   analog signals.
- 1           15.    An intermediary unit comprising:  
2                a connector coupled to a wired communication link;  
3                an intermediary frequency (IF) module to receive incoming IF signals  
4   over the wired communication link; and  
5                an IF-to-Digital converter to convert the incoming IF signals to digital  
6   data and format the digital data according to a format associated with a digital  
7   communication link.
- 1           16.    The intermediary unit of claim 15, wherein the connector is an  
2   electrical plug based on the wired communication link being electrical wiring.
- 1           17.    The intermediary unit of claim 15, wherein the connector is a  
2   telephone plug for insertion into a telephone jack based on the wired  
3   communication link being a telephone line.
- 1           18.    The intermediary unit of claim 15, wherein the IF-to-Digital  
2   converter formats the digital data according to an Ethernet format based on the  
3   digital communication link being an Ethernet communication link.
- 1           19.    An intermediary unit comprising:

1           20.     The intermediary unit of claim 19, wherein the connector is an  
2     electrical plug based on the wired communication link being electrical wiring.

1           21.     The intermediary unit of claim 19, wherein the connector is a  
2     telephone plug for insertion into a telephone jack based on the wired  
3     communication link being a telephone line.

1           22.     A method for transmitting information over a wireless network,  
2     comprising:  
3           converting incoming digital data to intermediate frequency (IF) signals;  
4           transmitting the converted IF signals over a wired network;  
5           retrieving the transmitted IF signals from the wired network; and  
6           converting the retrieved IF signals to wireless signals that can be routed  
7     to a wireless unit.

1           23.     The method of claim 22, wherein the converting of the retrieved  
2 IF signals includes converting the retrieved IF signals to radio frequency (RF)  
3 signals.

1           24.     The method of claim 22, wherein the wired network includes  
2 alternating current (AC) wiring.